



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,595	08/04/2003	Steven H. Schwartzkopf	4617	6524

23294 7590 03/02/2005
JONES, TULLAR & COOPER, P.C.
P.O. BOX 2266 EADS STATION
ARLINGTON, VA 22202

EXAMINER

HRUSKOCL, PETER A

ART UNIT	PAPER NUMBER
----------	--------------

1724

DATE MAILED: 03/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/634,595

Applicant(s)

SCHWARTZKOPF, STEVEN H.

Examiner

Peter A. Hruskoci

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/26 and 9/20/04, and 1/21/05.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 21-36 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-10 and 21-36 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Art Unit: 1724

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 7, 21, 22, 25, and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Iwatani 4,198,301. It is submitted that Iwatani disclose (see col. 3 line 5 through col. 6 line 40 the structure of the apparatus and method steps recited in the instant claims.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwatani 4,198,301. The claim differs from Iwatani as applied above by reciting the apparatus includes a specific storage reservoir connected to the inlet port of said filter chamber. It is submitted that the connection of the storage reservoir or pit 30 of Iwatani to the inlet port, or to a discharge port, would have been an obvious matter of engineering design to one skilled in the art, depending on the specific water treated and result desired. It would have been obvious to one skilled in the art to modify the apparatus of Iwatani by including the recited storage reservoir, to aid in collecting the contaminated backwash liquid for further filtration.

Claims 4, 5, 8, 9, 32, 33, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwatani as above, and further in view of Hsiung et al. 4,608,181. The claims differ from Iwatani as applied above by reciting the particles have a specific size, and dual filter

Art Unit: 1724

chambers are provided connected in series. Hsiung et al. disclose (see col. 4 line 35 through col. 5 line 51, and col. 9 lines 24-68) that it is known in the art to utilize the recited particle size, and dual filter chambers connected in series in a water filtration apparatus. It would have been obvious to one skilled in the art to modify the apparatus of Iwatani by including the recited particles and dual filter chambers in view of the teachings of Hsiung et al., to aid in filtering the process liquid. The specific particle size utilized, would have been an obvious matter of engineering design to one skilled in the art, depending on the specific liquid filtered and results desired, absent a sufficient showing of unexpected results.

Claims 6, 24, and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwatani as above, and further in view of Cochrane 4,211,656. The claims differ from Iwatani as applied above by reciting that the mass of particles expands to a specific volume during backwashing, and the apparatus includes a specific control means or system, and dual filter chambers connected in parallel. Cochrane disclose (see col. 2 line 9 through col. 5 line 29) that it is known in the art to utilize the recited volume, to aid in backwashing a liquid filtration apparatus, and a plurality of filter cells connected in parallel monitored by a microprocessor, to automatically sequence the backwashing of the filter cells. It would have been obvious to one skilled in the art to modify the apparatus of Iwatani by utilizing the recited volume, control means, and dual filter chambers, in view of the teachings of Cochrane, to aid in backwashing the filter bed, and removing particulates from the process liquid.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwatani as above, and further in view of Daley et al. 5,178,772. The claim differs from Iwatani as applied above by reciting the filtration apparatus includes a specific ultraviolet reactor. Daley et al. disclose

Art Unit: 1724

(see col. 3 line 4 through col. 6 line 66 that it is known in the art to utilize the recited reactor in combination with a filter to aid in removing metal contaminants from aqueous solutions. It would have been obvious to one skilled in the art to modify the apparatus of Iwatani by including the recited reactor in view of the teachings of Daley et al., to aid in removing metal contaminants from the liquid.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwantani as above, and further in view of Muller et al. 4,383,920. The claim differs from the references as applied above by reciting that the apparatus includes a specific vent tube. Muller et al. disclose (see col. 2 line 4 through col. 4 line 27) that it is known in the art to utilize a vent valve to relieve air and add air to a filter tank. It would have been obvious to one skilled in the art to modify apparatus of Iwatani as applied above by including the recited vent tube in view of the teachings of Muller et al., to aid in removing or adding air to the apparatus.

Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwatani as above, and further in view Holland 6,067,653 and Banks 4,885,083. The claims differ from Iwatani as applied above by reciting the apparatus includes a specific spray head to backwash contaminants selectively operable when the filtered liquid drops below a predetermined flow rate. Banks disclose (see col. 2 line 18 through col. 3 line 44) that it is known in the art to utilize a backwash shower nozzle to automatically deliver wash water to a filter bed in response to a pressure drop across the bed. Holland disclose (see col. 10 lines 6-40) that it is known in the art to utilize a flow rate sensor connected to a control panel of filter apparatus to monitor the backwashing requirements of the apparatus. It would have been obvious to one skilled in the art

Art Unit: 1724

to modify the references as applied above by utilizing the recited spray head and flow sensor in view of the teachings of Banks and Holland, to aid washing contaminants from the filter bed.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-5, 7-10, 21-25, 27, 28, and 32-36 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,638,422. Although the conflicting claims are not identical, they are not patentably distinct from each other because structure of the apparatus recited in the instant claims appears to be encompassed in the claims of the patent.

Claim 26 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,638,422 in view of Muller et al. 4,383,920. The claim differs from the claims of the patent by reciting that the apparatus includes a specific vent tube. Muller et al. disclose (see col. 2 line 4 through col. 4 line 27) that it is known in the art to utilize a vent valve to relieve air and add air to a filter tank. It would have been obvious to one skilled in the art to modify the claims of the patent by including the

Art Unit: 1724

recited vent tube in view of the teachings of Muller et al., to aid in removing or adding air to the apparatus.


Claims 6, 24, and 29-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,638,422 in view of Cochrane 4,211,656. The claims differ from the claims of the patent by reciting that the mass of particles expands to a specific volume during backwashing, and the apparatus includes a specific control means or system, and dual filter chambers connected in parallel. Cochrane disclose (see col. 2 line 9 through col. 5 line 29) that it is known in the art to utilize the recited volume, to aid in backwashing a liquid filtration apparatus, and a plurality of filter cells connected in parallel monitored by a microprocessor, to automatically sequence the backwashing of the filter cells. It would have been obvious to one skilled in the art to modify the claims of the patent by utilizing the recited volume, control means, and dual filter chambers, in view of the teachings of Cochrane, to aid in backwashing the filter bed, and removing particulates from the process liquid.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter A. Hruskoci whose telephone number is (571) 272-1160. The examiner can normally be reached on Monday through Friday from 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1724

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Peter A. Hruskoci
Primary Examiner
Art Unit 1724

2/28/05